1	QUINN EMANUEL URQUHART OLIV Frederick A. Lorig (Bar No. 057645)	ER & HEDGES, LLP
2	fredericklorig@quinnemanuel.com	
3	Steven M. Anderson (Bar No. 144014) stevenanderson@quinnemanuel.com	
4	Joseph M. Paunovich (Bar No. 228222) josephpaunovich@guinnemanuel.com	
5	Anthony P. Alden (Bar No. 232220) anthonyalden@quinnemanuel.com	
6	865 South Figueroa Street, 10th Floor Los Angeles, California 90017-2543	
7	Telephone: (213) 443-3000 Facsimile: (213) 443-3100	
8		
9	Attorneys for Plaintiff and Counter- Defendant Teledyne Technologies	
10	Incorporated	
11	UNITED STATES	DISTRICT COURT
12	CENTRAL DISTRIC	CT OF CALIFORNIA
13	WESTERN	N DIVISION
14	TELEDYNE TECHNOLOGIES INCORPORATED, a Delaware	CASE NO. CV 06-06803-MMM (SHx)
15	corporation,	The Honorable Margaret M. Morrow
16	Plaintiff,	PLAINTIFF AND COUNTER- DEFENDANT TELEDYNE
17	VS.	TECHNOLOGIES INCORPORATED'S CORRECTED SUPPLEMENTAL
18	HONEYWELL INTERNATIONAL, INC., a Delaware corporation,	CLAIM CONSTRUCTION BRIEF CONCERNING THE HONEYWELL
19	Defendant.	PATENTS-IN-SUIT
20		
21	AND COUNTERCLAIM	
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I. INTRODUCTION¹

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Honeywell argues that the majority of claim terms in its patents do not require construction because a person skilled in the art would understand them. In doing so, Honeywell misconceives the purpose of claim construction. <u>Every term</u> in a patent should be understood by a person of ordinary skill in the art of that patent. See Verve, LLC v. Crane Cams, Inc., 311 F.3d 1116, 1119 (Fed. Cir. 2002) (patent documents are meant to be "a concise statement for persons in the field"). Indeed, claim terms that cannot be understood by skilled persons should be held indefinite. Halliburton Energy Servs., Inc. v. M-I LLC, 2008 WL 216294 at *4 (Jan. 25, 2008) (a claim term is indefinite if "a skilled artisan could not discern the boundaries of the claim based on the claim language, the specification, and the prosecution history, as well as her knowledge of the relevant art area."). Rather, the purpose of claim construction is to determine <u>how</u> a person skilled in the art would have understood a claim term, and to convey that understanding to the jury. See Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111, 1116 (Fed. Cir. 2004) ("A court construing a patent claim seeks to accord a claim the meaning it would have to a person of ordinary skill in the art at the time of the invention.").

Honeywell's assertion that lay persons would inherently appreciate how those skilled in the art of aircraft communications would understand terms such as "aeronautical satellite system," "first communication medium," and "operable to execute a method," in the context of technical patents concerning satellite communications and software uploading is not only unsupported, but defies belief. The jury will require guidance from the Court to understand these terms. TM Patents L.P. v. IBM Corp., 72 F. Supp. 2d 370, 377-78 (S.D.N.Y. 1999) (Markman)

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¹ Teledyne files this Corrected Supplemental Brief pursuant to the Court's Order of February 11, 2008.

"require[s] that the Court construe the patent <u>for the jury</u> as a matter of law").² Teledyne's proposed constructions properly provide that guidance in the context of the claim language, written description, and the prosecution history, and should be adopted the Court. <u>See Medrad, Inc. v. MRI Devices Corp.</u>, 401 F.3d 1313, 1319 (Fed. Cir. 2005) ("We cannot look at the ordinary meaning of the term ... in a vacuum. Rather, we must look at the ordinary meaning in the context of the written description and the prosecution history.").

II. THE '152 PATENT

A. The Prosecution History of the '152 Patent

Honeywell filed the '152 application on December 30, 1998. (Declaration of Anthony P. Alden ("Alden Decl."), Ex. A at 6). The Examiner found each as-filed claim to be anticipated by U.S. Patent No. 6,201,797 (Leuca, et al.; filed 12/12/97). (Alden Decl., Ex. A at 74). Honeywell responded by amending claims 1 and 10 to include the terms "first communication medium," "second communication medium," and "aeronautical satellite system." (Alden Decl., Ex. A at 90-91, 94). Honeywell argued that the amended claims were patentable because the Leuca reference did not disclose these newly-added elements:

Leuca does not disclose, teach or suggest various elements of claim 1. For example, Leuca fails to disclose, teach or suggest a **first communication medium** having both an **aeronautical satellite system** and a radio ground station, a **second communication medium** comprising a **direct satellite** is adapted to receive data information and to broadcast data information to said receiver, or wherein the information request system is configured to select one said aeronautical

² Unless otherwise noted, all emphasis herein has been added by Teledyne.

system and said radio ground station from said first communication medium.

(Alden Decl., Ex. A at 91).

Honeywell contends that it "did not argue that the first and second communication mediums were different" because—according to Honeywell—"the prior art Honeywell distinguished also had two different communication mediums." (HW Responsive Brief, p. 21). Honeywell's argument is unpersuasive for many reasons. First, it begs the question—why did Honeywell amend the claims to include a "first communication medium" and a "second communication medium" if it intended for them to be the same media? Second, as the above-quoted passage shows, Honeywell did distinguish amended claims 1 and 10 over the prior art on the basis of two different communication media—the first being "both an aeronautical satellite system and a radio ground station," and the second "comprising a direct [broadcast] satellite." Finally, the Examiner certainly believed that the prior art did not teach first and second communication media:

The following is an examiner's statement of reasons for allowance: the prior art made of record does not teach or fairly suggest in combination a data communications system for retrieving data information, said data communications system comprising: ... a first communication medium configured for transmission of requests for the data information from the information request system to said data source, said first communication medium comprising: an aeronautical satellite system and a ground station, ...; a second communication medium comprising a direct broadcast satellite adapted to receive data information from said data source and to broadcast said data information to said receiver;

(Alden Decl., Ex. A at 104-105).

В. "First communication medium"/"second communication medium": Claims 1 and 10

The phrases "first communication medium" and "second communication medium" have no ordinary meaning to lay persons or to those skilled in the art, and thus require the Court's interpretation. Even Honeywell's prosecuting attorney who holds a Bachelor in Electrical Engineering—did not know the meaning of the term "first communication medium" without additional information. (Alden Decl., Ex. E at 111:14-21 ("Q. Do you know what a first communication medium is? A. "Not specifically just hearing those terms, I'm -- the claims seem to help provide some idea, but I don't have -- those words don't specifically have a meaning.").

Teledyne's constructions adopt those imparted by the claims themselves. Claims 1 and 10 define the term "first communication medium" as "comprising "an aeronautical satellite system and a ground station . . . and a radio ground station. . . " '152 patent at 10:55-66, 12:55-66. Similarly, the claims define the term "second communication medium" as "comprising a direct broadcast satellite." Id. at 13:11-12. Honeywell's assertion that the first and second communication media can be "any suitable media" or "any medium" is thus inconsistent with the claim language. Phillips v. AWH Corp., 415 F.3d 1303, 1314 (Fed. Cir. 2005) ("[T]he claims themselves provide substantial guidance as to the meaning of particular claim terms.") (citations omitted).

The claim language also differentiates between a "first communication medium" and a "second communication medium," giving rise to a presumption that they carry different meanings. See CAE Screenplates, Inc. v. Heinrich Fiedler GmbH & Co. KG, 224 F.3d 1308, 1317 (Fed. Cir. 2000) ("In the absence of any evidence to the contrary, we must presume that the use of these different terms in the claims connotes different meanings."); see also Applied Med. Res. Corp. v. U.S. Surgical Corp., 448 F.3d 1324, 1333 n. 3 (Fed. Cir. 2006) (quoting CAE Screenplates).

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This presumption is confirmed by the file history. As explained above, it was only on the basis of Honeywell's amendment to include two communication media that the patent was allowed. Having relinquished coverage during prosecution of systems not including two separate communication media, Honeywell is now precluded from recapturing such systems through claim construction. Schriber-Schroth Co. v. Cleveland Trust Co., 311 U.S. 211, 220-21 (1940) ("[A] claim in a patent as allowed must be read and interpreted with reference to claims that have been cancelled or rejected, and the claims allowed cannot by construction be read to cover what was thus eliminated from the patent."); see also SanDisk Corp. v. Memorex Prods., Inc., 415 F.3d 1278, 1286 (Fed. Cir. 2005).

Although Honeywell seeks to distance itself from the file history, it concedes that, at very least, it distinguished the '152 patent over the prior art "on the basis that the first communication medium 'comprises both an aeronautical satellite system and a radio ground station." (HW Supp'l Brief, p. 10). Yet, Honeywell now contends that the "first communication medium" can be "any suitable media," with no mention of an "aeronautical satellite system and a ground station."

Finally, the specification demonstrates that the "first" and "second" communication media must be different. See, e.g., '152 patent at 1:54-58 ("Similarly, the receiver is coupled to the data source via any appropriate and available medium, such as a satellite link, and is **suitably different** from the medium coupling the information request system to the data source."); 2:41-45 ("The information request system 102 is suitably coupled to the data source 104 via a **first communication medium** 208, and the receiver 106 is suitably coupled to the data source 104 via a **second communication medium** 210."); 10:22-27 ("a system user may request data information from a data source 104 through information request system 102 and **first communication medium** 208. . .[D]ata source 104 may retrieve the requested data and transmit the data to receiver 106 through **second communication medium** 210.").

Ignoring all of this—the claim language, the specification and the file

1 history—Honeywell contends that the "first communication medium" can be "any 2 suitable media," and the "second communication medium" can be "any medium." In 3 support of this contention, Honeywell points to several passages in the specification, 4 5 such as "first and second communication media 208, 210, may be the same or different media or separate channels of the same medium." '152 patent at 2:45-47. 6 But the specification was not changed to reflect Honeywell's narrowing amendments 7 8 to the claims, Honeywell's arguments to the Examiner, and the Examiner's reasons 9 for allowance. Teledyne's construction properly reflects both the language of the amended claims and the prosecution history of the patent. 10

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"Aeronautical satellite system": Claims 1, 5, 6, 7, 10 and 11 C.

As at the constructive date of invention—December 30, 1998—"aeronautical satellite system" had a particular meaning to those skilled in the art of satellite communications. (Declaration of Dr. R. William Kreutel ("Kreutel Decl."), ¶ 10).³ The parties' respective constructions of the term are identical, with one important exception—Teledyne's construction⁴ clarifies that an "aeronautical satellite system" is not the same as a "direct broadcast satellite." This distinction is once again counseled by the presumption that different claim terms have different meanings. Claims 1, 7 and 10 distinguish between an "aeronautical satellite system" and a "direct broadcast satellite," clearly suggesting that these terms mean different things.

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Honeywell's contention that "[l]ay persons can understand the phrase" is belied by its own prosecuting attorney. (Alden Decl., Ex. E at 56:16-25 ("Q. Do you have any understanding as to whether an aeronautical satellite is different to a direct broadcast satellite? THE WITNESS: I don't have any specific understanding if they're -- quite frankly I don't quite understand what they exactly are, but I don't have any understanding that, you know, how they relate or --.")).

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[&]quot;At least one satellite that is not a direct broadcast satellite, which is configured to receive data request signals from a transmission unit and forward or transmit the signals to a ground earth station."

<u>See CAE Screenplates</u>, 224 F.3d at 131; <u>see also Applied Med. Res. Corp.</u>, 448 F.3d at 1333 n. 3; Nystrom v. TREX Co., 424 F.3d 1136, 1143 (Fed. Cir. 2005).

The distinction is also confirmed by the prosecution history. The only amendment made by Honeywell to as-filed claim 8 was to add the word "aeronautical" before the words "satellite system." (Alden Decl., Ex. A at 98). By adding this word, Honeywell sought to distinguish an "aeronautical satellite system" from another satellite system. And, the only other type of satellite system mentioned in the claims is a "direct broadcast satellite." As discussed above, it was only after Honeywell made this distinction that the patent was allowed. SanDisk Corp, 415 F.3d at 1286.

While Honeywell cherry-picks a passage from the specification to support its expansive construction, it fails to point out that the passage refers to a diagram. That diagram—Figure 3—depicts an "aeronautical satellite system" and a "direct broadcast system" as separate systems. Indeed, the specification explicitly identifies the Inmarsat Aeronautical Satellite Communications System as an example of an "aeronautical satellite system." '152 patent at 8:30-34. Conversely, nowhere does it state that Inmarsat can also be "direct broadcast satellite."

In fact, Honeywell's proposed construction undermines the stated purpose of its purported invention, which is to utilize a low-bandwidth to send a request for information, and a high-bandwidth to receive the requested information. <u>Id.</u> at 3:9-15 ("The satellite link 319 facilitates access to greater bandwidth than reliance solely on the telephone system 314 and afford relatively higher data transfer rates

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⁵ Honeywell's assertion that Teledyne imports a limitation from this figure is misplaced. The figure illuminates Honeywell's understanding at the time that the two satellite systems are different.

⁶ Remarkably, Honeywell contends that Teledyne's use of Inmarsat infringes the patent because—despite the plain words of the specification—Honeywell contends that Inmarsat is a "direct broadcast satellite."

from the data source 104 to the receiver 106."). If, as Honeywell argues, the "direct broadcast satellite" could also be the "aeronautical satellite," the bandwidths used to both <u>send</u> and <u>request</u> the data would be exactly the same, thus defeating the purported invention's purpose.

Teledyne's proposed construction is also consistent with the understanding of those skilled in satellite communications during the 1998-1999 timeframe. Dr. R. William Kreutel—who has over 40 years of experience in satellite communications—testifies that "[i]n the 1998-99 time period, within the accepted nomenclature of the satellite communication business, an Aeronautical Satellite would not be considered a Direct Broadcast Satellite." (Kreutel Decl., ¶ 10).

D. "Direct broadcast satellite": Claims 1, 4, 7, and 10⁸

The term "direct broadcast satellite" has a particular meaning to those skilled in the art of satellite communications. (Kreutel Decl., ¶¶ 4, 6). Consistent with this meaning, Teledyne's construction⁹ properly distinguishes between a "direct broadcast satellite" and an "aeronautical satellite system;" a distinction which—as explained above—is supported by the claim language, the file history, the specification, and the testimony of an expert in satellite communications.

Honeywell argues that Teledyne's proposed construction improperly inserts three limitations into the claim. Honeywell is wrong. Rather, unlike Honeywell's construction, Teledyne's construction reflects that the words "direct" and "broadcast" add meaning to the word "satellite" in the term "direct broadcast

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⁷ Unlike Dr. Kreutel, Honeywell's purported expert cites no documents in support of his opinion.

Because the Court's construction of the term "direct broadcast satellite" will resolve the parties' dispute concerning the terms "broadcasting" and "direct broadcast system," Teledyne does not address them separately herein.

satellite." This meaning is found in the intrinsic evidence cited by Honeywell
itself—extracts from the web sites of DirecPc and Dish Network. See, e.g.
Teledyne's Opening Brief, Paunovich Decl. in support thereof, Ex. 11 ("DirecPC
downloads content from the Internet directly from the server to our satellite network
and straight into the back of your PC DirecPC receives a Usenet Newsgroup
feed from the Internet, which allows Turbo Newscast to automatically broadcast
thousands of newsgroups over the DirecPC satellite system.").
Honeywell's extracts show that "direct" and "broadcast" were intended to

Honeywell's extracts show that "direct" and "broadcast" were intended to capture two defining characteristics of "direct broadcast satellite" service at the time: first, the transmissions were sent "directly" to end-users, as opposed to being routed from a central receiving location to consumers via a network; and second, the satellite "broadcast" the same transmissions to <u>all</u> consumers (for example, "thousands of news groups"). (Kreutel Decl., ¶¶ 3-5). Indeed, Merriam's Webster's Collegiate Dictionary (1999) defines "broadcast" as "to make widely known." (Alden Decl., Ex. B at 129). The Compact Oxford English Dictionary defines "broadcast" as "[t]o scatter or disseminate widely." (Alden Decl., Ex. C at 133).

This interpretation is underscored by the claim language and the specification, which consistently use the term "broadcast" with respect to "direct broadcast satellite," but the term "transmit" with respect to an "aeronautical satellite." See, e.g., '152 patent at 10:59-61, 11:5-7 (the "aeronautical satellite system" is "adapted to transmit data information requests," whereas the "direct broadcast satellite" is adapted "to broadcast said data information to said receiver."). See CAE Screenplates, 224 F.3d at 1317.

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⁹ "A satellite that is not an aeronautical satellite, which broadcasts the same transmissions directly to all end-users and cannot receive transmissions from end-users."

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Finally, "direct broadcast satellites" were broadcast only, meaning that they could not receive transmissions from end-users. The Leuca reference observes that "[p]resently, the available DBS systems are broadcast-only systems." And, Dr. Kreutel testifies that "the systems included a return link via a telephone circuit and a satcom earth station in order to provide pay-per-view or TV-on-demand services." (Kreutel Decl., $\P 4$). 10

Honeywell's construction conveniently ignores all of this. It conflates the distinction between an "aeronautical satellite system" and a "direct broadcast system," and fails to incorporate any notion of "directness" or "broadcasting." Instead, Honeywell once again relies on a passage from the specification that was not revised to reflect the amended claims. The relevant passage—'152 patent at 3:9-13—is directed to a "satellite link," not a "direct broadcast satellite." Honeywell uses a broad definition for "satellite link" for a completely different and narrower term, "direct broadcast satellite." 11

E. "Network system": Claims 1, 3, 4 and 10

Teledyne agrees that "network system" can be any "suitable system for communicating the request [for information] to the data source 104." (HW Responsive Brief, p. 23). But Teledyne's construction¹² clarifies that such system

¹⁰ Honeywell's argument that Teledyne's construction undermines the purpose of its purported invention is misplaced. "Direct broadcast satellite"—properly construed as Teledyne contends—could certainly facilitate "business and personal communications." Just as with television provided by direct broadcast satellite, "business or personal communications" would be broadcast to all, but "picked-up" only by the individual parties to the communication. (Kreutel Decl., ¶ 5).

Honeywell's construction would also render claims 1, 4, 7, and 10 indefinite. Which satellites "facilitate[] access to greater bandwidth than reliance solely on the telephone system?" Not even Honeywell's prosecuting attorney could answer this question. (Alden Decl., Ex. E at 122:18-25).

^{12 &}quot;A system remote from the vehicle configured to transmit data or voice communications between various communication systems."

must be remote from the vehicle. The only two preferred embodiments of a "network system" in the specification—"telephone network" and "television cable network"—are both remote from the vehicle requesting the data. And, this is also the only way the system is portrayed in figures 3 through 5 of the specification.

This is confirmed by the claim language. For example, claim 1 provides that "said ground station [is] coupled to said network system to facilitate the transferring of said data information request to said network system." It is evident from this claim—as it is claims 3, 4, and 10—that the "network system" only comes into play after a request is received by the "ground station."

F. "Transmission unit": Claims 1, 7 and 10

Honeywell asserts that "the '152 patent expressly defines 'transmission unit." (HW Responsive Brief, p. 23). But Honeywell only quotes those portions of the specification that support its broad definition, while ignoring all the others. For example, consistent with Teledyne's construction, the specification provides that "[i]nformation requests are transmitted to the data source 104 by the transmission unit 206 via first communication medium." '152 patent at 6:14-16. Similarly, figures 2 through 5 all show the "transmission unit"—206, 306, 406, and 506, respectively—as being the unit that actually transmits the request; not merely "a component through which" requests are transmitted—as Honeywell suggests "4— which would conceivably include a cable, adapter, or switch.

The claims also contradict Honeywell's broad construction. For example, Claim 1 prescribes that the "transmission unit comprises a satellite data unit, and a

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¹³ "A unit on an vehicle that transmits a request for data to the data source via the first communication medium." On further consideration of the intrinsic evidence, Teledyne agrees that a "transmission unit" can be on any vehicle.

[&]quot;A component through which information requests to the data source are transmitted. In addition, the transmission unit may act as a receiver and receive signals from the data source."

radio frequency unit." '152 patent at 10:53-54. Similarly, claims 10 states that the "transmission unit comprises a satellite data unit, a radio frequency unit, and a wireless LAN unit." Id. at 12:53-54. Each of these is not merely "a component through which a request is transmitted," but actually <u>sends</u> the request.

Finally, Honeywell seeks to insert a new element into the term, i.e., that "the transmission unit may act as a receiver and receive signals from the data source." As a threshold matter, the claims call out the "transmission unit" and a "receiver" as separate elements. See id. claim 1 at 10:53, 11:8; claim 7 at 12:3, 12:26. And, Honeywell's new element undermines the distinction between the first and second communication media—a distinction which, as discussed above, was critical in distinguishing the patent over the prior art. Specifically, the Examiner allowed the patent only after Honeywell amended the claims to recite that the information request is transmitted via the first communication medium and the requested data is received via the second communication medium.

G. "Data source": Claims 1 and 10

Honeywell contends that the term "data source" needs no construction because a jury will understand it. But Honeywell's own prosecuting attorney understands the term differently than Honeywell's proposed "plain meaning." ¹⁵ (Alden Decl., Ex. E at 106:4-8 ("THE WITNESS: ... [D] at a source is some type of system that has data stored in it, maybe a provide -- you know, it keeps it there or maybe it collects it or has access to it to source it to someone."). The prosecuting attorney's and Teledyne's definitions mirror the specification, which states that "[d]ata source 104 stores or channels information . . ., receives requests for

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¹⁵ "A source of data remote from the vehicle, which stores or channels information, receives requests for information from the information request system and transmits the requested data to the receiver."

information from the information request system 102, and transmits the requested data to the receiver 106." '152 patent at 2:59-64.

The patent also contemplates that the "data source" will be remote from the vehicle that requests the data. See, e.g., id. at 1:6-8 ("The present invention relates to . . . systems for requesting and receiving data from a **remote** data source."); 2:52-54 ("The information request system 102 and the receiver 106 are **remote** from the data source 104."); and figures 1-5 (104). Indeed, Honeywell has still not explained the need for the purported invention—which Honeywell asserts "replaces air-to-ground phones on aircraft"—if all the data were already on the aircraft. (HW Responsive Brief, p. 22).

Honeywell's contention that Teledyne's construction is redundant is misplaced. It is the "network system"—not the "data source"—to which the claims attribute a storage function. '152 patent at 10:48-49 ("data source comprising a network system for the storage and delivery of data."). While the "direct broadcast satellite" broadcasts data directly to the receiver, the data source transmits the data to the satellite. Id. at 11:4-7 ("a direct broadcast satellite adapted to receive data information from said data source and to broadcast said data information to said receiver"). In any event, Honeywell must concede—having done so for numerous other terms, such as "network system"—that construing a claim term by reference to its functions does not render later claim language superfluous.

H. "Information request system": Claims 1, 4, and 10

The term "information request system" is idiosyncratic to the '152 patent and has no generally accepted meaning in aircraft communications. To the extent Honeywell offers an "alternative" construction, ¹⁶ both parties base their proposed constructions on the same passage from the specification: "The <u>information request</u>

¹⁶ "A system configured to enable a system user to request information."

system 102 is configured to enable a system user . . . to request information from the data source 104 via the first communication medium 208." '152 patent at 5:32-35. But while Teledyne's construction¹⁷ is virtually identical to this passage, Honeywell's ignores its second half, i.e., "via the first communication medium from the data source."

More importantly, the claims and the specification make clear that the "information request system" is—as its name suggests—the component of the overall "data communications system" dedicated only to sending a request for information. See '152 patent claims 1, 3, 10-11; see also id. Abstract ("[A] data communications system having a data source, an information request system coupled to the data source and adapted to request data information from the data source, and a receiver coupled to the data source and adapted to receive the data information requested the information request system."). Teledyne's construction reflects this particular purpose of the "information request system," while Honeywell's does not.

I. "Satellite data unit": Claims 1, 4, 5, 7, 8, and 10

Honeywell contends that the term "satellite data unit" requires no construction. Yet, Honeywell's prosecuting attorney—who holds a degree in electrical engineering—does not understand the term. (Alden Decl., Ex. E at 109:8-13 (Q. Do you have an understanding of what the term satellite data unit means? THE WITNESS: No."). In contrast to Honeywell's construction, the claims show that the "satellite data unit" does not merely "facilitate[] communications via satellite"—as Honeywell contends—but actually transmits the request for information. See, e.g., '152 patent at 10:60-62 ("aeronautical satellite system is adapted to transmit data information requests from said satellite data unit to said

¹⁷ "A dedicated system configured to enable a system user to request (footnote continued)

ground station."); 11:54-55 ("transmitting the data information requests from said satellite data unit to an aeronautical satellite system . . ."); 12:8-11 ("said satellite frequency unit_configured for providing satellite transmission signals to an aeronautical satellite system . . .").

Similarly, the specification states that the "SDU receives the request and generates a corresponding signal to be transmitted according to any suitable satellite communication technique." '152 patent at 6:67-7:2. And, figure 8 (602) refers to the "satellite data unit" as the "satellite transmitter unit." Teledyne's proposed construction incorporates these concepts, while Honeywell's does not. Indeed, Honeywell's construction is so broad that it could conceivably include a telephone if it somehow "facilitates communications via satellite."

J. "Radio frequency unit": Claims 1, 4, 7, 8 and 10

As Honeywell's own "Abbreviation & Acronym Dictionary" shows, a "radio frequency unit" typically refers to a component in a satellite communications ("SATCOM") system. (Alden Decl., Ex. D at 144). In contrast, as used in the patent, the "radio frequency unit" transmits conventional radio signals, <u>not</u> satellite transmissions. <u>See</u>, <u>e.g.</u>, '152 patent at 4:1-4 ("the receiver 106 may be compatible with any appropriate communication medium, including **radio**, wireless LAN communications, **satellite communications**, or any other medium."); 6:58-61 ("the transmission mechanisms include various transmitters and transceivers used in the conventional operation of the aircraft, such as a **satellite data unit**, **a radio frequency unit**, and a wireless LAN unit.").

Moreover, it is clear from the claims that the "radio frequency unit" provides radio transmissions to a ground station. <u>See</u>, <u>e.g.</u>, '152 patent at 10:66-67 ("a radio ground station adapted to receive request signals from said **radio frequency unit**");

information via the first communication medium from the data source."

12:13-14 ("said **radio frequency unit** for providing radio transmission signals to said radio ground station").

Teledyne's construction¹⁸ reflects the patent's idiosyncratic use of the term, while Honeywell's¹⁹ does not. Honeywell's construction merely adds the word "communications." This offers little guidance to jurors who will, presumably, be more familiar with the word "radio" than "radio frequency unit." The phrase requires more elaboration than merely adding the single word.²⁰

K. "Wireless LAN System"/"Radio Frequency System"/"VoiceChannel System": Claim 6

Honeywell contends that lay persons and those skilled in the art would understand these terms, even though the specification contains no description of these "systems." In fact, the most Honeywell points to is the phrase "group of transmission mediums" in claim 6, and an inapposite reference to "multiple media corresponding to various transmission mechanisms." (HW Supp'l Brief, p. 15). But nowhere in the specification are these "transmission mediums" identified. Honeywell's' own prosecuting attorney—qualified in electrical engineering and familiar with the patent—conceded that he could not define these terms "with any kind of reasonable certainty." (Alden Decl., Ex. E at 125:3-4; see also id. at 123:14-128:22). Because the patent contains no basis for a "reasonable, unambiguous meaning" of the claim terms, they are indefinite. Personalized Media Comms., Inc. v. Int'l Trade Comm'n, 161 F.3d 969, 705 (Fed. Cir. 1998).

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¹⁸ "A unit for providing conventional radio transmission signals to a ground station."

[&]quot;A radio frequency communications unit."

The term "selecting" was addressed in Teledyne's previous *Markman* briefs.

III. THE '468 PATENT

A. "System Server": Claims 1, 2, 7, 9, 12, 13 and 15^{21}

The parties' primary dispute concerning the term "system server" is whether the device is remote from the aircraft. Honeywell's argument that the claim language does not explicitly require a <u>remote</u> "system server" misses the mark.

As the Federal Circuit in Phillips emphasized, the proper judicial construction of a claim term is in the context of the particular technology and the description in the specification. Phillips, 415 F.3d 1313. Here, the purpose of the '468 patent is not to transfer data from one device on an aircraft to another on an aircraft as Honeywell's construction for "system server" would seemingly suggest. Rather, Honeywell even admits that the '468 patent "relates to systems and methods for delivering software and/or data updates to vehicles (such as aircraft) from **remote locations**." '468 patent at 1:7-10. The reason being that "[a]s aircraft move about the country or the world, it is very difficult for pilots to maintain accurate and timely [navigational] information," and thus, the "need for current data becomes paramount" to control, navigate or otherwise affect their aircraft. <u>Id.</u> at 1:15-26. The only device described in the '468 patent that delivers data updates to a vehicle from "remote locations" is the system server. <u>See, e.g., id.</u> at Fig. 1. Thus, a person of ordinary skill in the art would clearly understand that a "system server" is remote from the vehicle in the context of the invention.

After further consideration, Teledyne has no objection to Honeywell's construction for "system server" insofar as a server can be "a device or computer system or software."

Contrary to Honeywell's assertions, a lay person would not understand the term "system server" outside of the context of the '468 patent. In fact, Honeywell's prosecuting attorney admits that the term would be interpreted by a person skilled in the art of the '468 patent. (Declaration of Joseph M. Paunovich ("Paunovich Decl."), Ex. A at 274:14-276:4 ("Q. So a lay person wouldn't be able to understand (footnote continued)

1	A person of ordinary skill in the art would also understand that a "system
2	server" must be <u>capable</u> of "obtaining, storing and sending" data updates to a vehicle
3	server "via a data connection," from the plain language of the claims and the
4	specification. '468 patent at Cl. 1 ("obtaining and storing" and "forwarding via a
5	data connection), Cl. 9 ("receiving" and "transmitting via a data connection"),
6	2:18-20 ("The system server is configured to receive and store said data updates
7	from a source."), 4:44-45 ("System server 102 communicates with a vehicle server
8	116 associated with vehicle 120 via a data network 112."). And, Honeywell's
9	argument that this aspect creates superfluous claim language is belied by its own
10	construction. Honeywell ignores its repeated maxim of following the heavy
11	presumption of plain meaning of the claim language, and incorporates details of the
12	preferred system server described in the '468 patent that would "obtain, store and
13	send" data: "an administrative application/program 106, a database 104 and an
14	interface application 108." Joint Claim Construction Chart, Honeywell's Proposed
15	Construction, Ex. A at 29; see also '468 patent at 3:57-64, 4:38-43. The
16	incorporation of such details from the preferred embodiment is inconsistent with the
17	plain language of the claims and should be rejected. Phillips, 415 F.3d at 1320
18	(quoting SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc., 242 F.3d
19	1337, 1340 (Fed. Cir. 2001)) ("one of the cardinal sins of patent law" is "reading a
20	limitation from the written description into the claims.").

"Vehicle Server": Claims 1, 2, 7, 9, 12, 13 and 15²³ В.

The only dispute between the parties' respective constructions concerning the term "vehicle server" is whether it must be separate from the "component."

what the meaning of the phrase is? A. No, it would be, it would be interpreted by a person of skill in the art, which I'm not.") (Objections omitted)).

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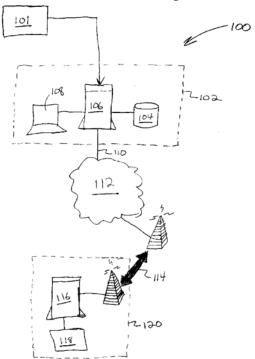
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Beginning with the plain language of the claims, it is clear that the component is a separate device from the vehicle server. This must be true because if the "vehicle server" is also the component, then the "system server" would be the device performing the loading step of the claim. For example, the third element of claim 1 makes clear that the <u>vehicle</u> server performs the loading step, not the <u>system</u> server: "loading said data update from said vehicle server into a component at said vehicle." '468 patent at 10:40-42. This claim language cannot be ignored. Moreover, if the "vehicle server" and "component" were one and the same, the terms would be improperly redundant. See CAE Screenplates, 224 F.3d at 1317 ("In the absence of any evidence to the contrary, we must presume that the use of these different terms in the claims connotes different meanings."). What is more, when asked about both terms appearing in claim 1 of the '468 patent, Honeywell's prosecuting attorney acknowledged that each word in a claim is presumed to have some meaning.

(Paunovich Decl., Ex. A at 299:14-300:10).

Teledyne's proposed construction also accords with the depictions and description of the "vehicle server" in the specification of the '468 patent. For example, Figure 1 to the right depicts the vehicle server 116 and component 118 as clearly identifiable separate constituent parts that make up a system that is capable of performing the method of the claims. '468 patent at Fig. 1. This depiction comports with the description that a "vehicle server 116 is any



After further consideration, Teledyne has no objection to Honeywell's construction for "vehicle server" insofar as a server can be either "a hardware or software device."

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hardware or software device that is capable of receiving data updates from system
server 102 and loading the updates in component 118." '468 patent at 5:18-22.
Indeed, "[t]he vehicle server 116 described therein is a central node through which
terminals are able to communicate with avionics systems [separate components]."
<u>Id.</u> at 5:29-31.

In contrast, Honeywell's construction improperly ignores both the claim language and the specification in that the "vehicle server" and "component" are not required to be separate devices in the vehicle. This proffered construction is inconsistent with the intrinsic record and should be rejected.

C. "Data Connection": Claims 1, 2, 7, 9, 12, 13 and 15

Neither party seriously disputes that the "data connection" is the link between the system server and vehicle server that is used to "transfer" data updates and "verify" successful load. Although unclear, a potential reading by Honeywell of its proffered construction may be that it encompasses the prior art "data connection" that is disclaimed in the specification of the '468 patent. In particular, the disclaimed subject matter includes:

Conventional techniques of updating databases have been cumbersome and time consuming. Typically, a customer (such as an airline) obtains a diskette containing the upgrade . . . [and] then go[es] to individual aircraft and manually load[s] the data update using a specialized data loader

'468 patent at 1:50-62.

Indeed, Honeywell has suggested that the '468 patent may cover one prior art "electrical data connection" involving the use of a USB thumb drive to "manually load the data update." Accordingly, the Court should reject Honeywell's construction insofar as it potentially encompasses the disclaimed prior art. Phillips,

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415 F.3d at 1316 ("the specification may reveal an intentional disclaimer, or disavowal, of claim scope by the inventor."). 24

Teledyne's construction does not improperly capture the disclaimed prior art, and is supported and consistent with the term as it is used in the specification of the '468 patent: "digital communications medium." '468 patent at 4:46-49.

D. "Component": Claims 1, 2 and 7

The parties dispute two aspects of the construction for this term. First, the parties dispute whether the "component" is <u>separate</u> from the vehicle server.

Second, the parties dispute whether the "component" must "<u>use</u> the data updates to perform a function."

As explained above with respect to the claim term "vehicle server," the plain meaning of the claim language makes clear that the "component" must be <u>separate</u> from the vehicle server. Moreover, the applicants' depictions and description of the "component" hardware device set forth in the specification of the '468 patent are consistent with Teledyne's construction. '468 patent at 5:18-22, 5:29-31, and Fig. 1. For the same reasons, Honeywell's construction should be rejected.

As regards the parties' second dispute, it is important again to understand the claim term "component" in the context of the invention and the description in the specification. "As aircraft move about the country or the world, it is very difficult for pilots to maintain accurate and timely [navigational] information," and thus, the "need for current data becomes paramount" to control, navigate or otherwise affect their aircraft. '468 patent at 1:15-26. It is nonsensical to suggest that the component in the context of Honeywell's invention is a mere storage vessel for data. Rather, the

It is also worth noting Honeywell's prosecuting attorney agrees that a "data connection" is a link that enables two things to transmit or receive information or data between each other. See Paunovich Decl., Ex. A at 300:21-302:13. The prior art method involving a USB drive, however, may not require such an ability.

1	component actually uses the data update to perform the function of aiding the pilot
2	in controlling, navigating or otherwise affecting the aircraft. This is consistent with
3	the specification which explicitly requires that the "component" (e.g., a navigation
4	computer) use data updates to perform a function: the "[c]omponent 118 is any
5	avionics or other aircraft device such as a flight management computer (FMC),
6	flight management system (FMS), global positioning system (GPS), navigation
7	computer or the like [that] suitably uses data upgrades from data source 101 to
8	perform a function ." '468 patent at 5:45-54. Indeed, there is nothing that suggests
9	that any of the exemplary components (e.g., navigation computer) merely store data
10	updates for later use by additional components.
11	E. Construction of the "Loading," "Verifying" and "Receiving" Steps
12	The plain language of claim 1 of the '468 patent (and claims 2 and 7 that
13	depend there from) requires the vehicle server to perform a "loading" step and a
14	"verifying" step. Similarly, the plain language of claim 9 (and claims 12, 13 and 15
15	that depend therefrom) requires a "receiving" step.

"Loading Said Data Update From Said Vehicle Server Into A
 Component At Said Vehicle": Claims 1, 2 and 7

The language of the claims require the vehicle server "load" a data update into a component, but there is no explanation in the claims of what it means to "load." The only place that the "loading" step is explained is in the specification: "[a]fter the data update is provided to vehicle server 116, [when] the relevant data is extracted, processed, and loaded into component 116 (step 214)," the "component 118 suitably uses data upgrades from data source 101 to perform a function." '468

patent at 5:52-54, 6:36-38. Taken in this context, it is clear that "loading" requires more than merely transferring data from a vehicle server to a component.²⁵

Honeywell's proffered construction does not explain the "loading" step (merely reciting back the language of the claim phrase), and should be rejected. <u>See Harris Corp. v. IXYS Corp.</u>, 114 F.3d 1149, 1152 (Fed. Cir. 1997) ("A further, compelling reason for rejecting Harris's proposed construction of the [] limitation is that Harris's construction would make the limitation entirely circular").

 "Verifying From Said Vehicle Server To Said System Server Via Said Data Connection That Said Loading Step Completed Successfully": Claims 1, 2 and 7.²⁶

The parties only dispute concerning this claim phrase is whether the result of the verification must be sent to the system server by the vehicle server using the same data connection that was used to transmit the data update to the vehicle server in the second element of claim 1.

The plain language of the claims requires that the vehicle server confirm to the system server that a data update was successfully loaded into a component, and that the vehicle server send the result of this check to the system server using the same data connection that was used to transmit the data update to the vehicle server. '468 patent at 10:43-45. Indeed, the "verifying" step of claim 1 originates "from said vehicle server," and uses "said data connection" to transmit the check to the system server. Id.

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304:14.

Even Honeywell's prosecuting attorney admits that loading requires processing and saving of data on the device. See Paunovich Decl., Ex. A at 303:5-

After further consideration, Teledyne has no objection to the aspect of Honeywell's construction for the "verifying step" insofar as either the vehicle server or the component can perform the check to verify that the data update was properly loaded.

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Honeywell's construction is inconsistent with the language of the claims because it is silent as to what device sends the "verification" of successful load to the system server. In addition, Honeywell's construction completely ignores the requirement that the results of the check be sent to the system server using the same data connection that was used to send the data update to the vehicle server. Indeed, the claims require the use of "said data connection" that was used in the second element of the claims. If this were not true, then "said data connection" would lack antecedent basis. 35 U.S.C. § 112, second paragraph. Accordingly, the Court should reject Honeywell's proposed construction and adopt Teledyne's construction.

> 3. "Receiving A Confirmation From Said Vehicle Server Via Said Data Connection When Said Data Update Is Successfully Loaded": Claims 9, 12, 13 and 15.²⁷

Both parties' constructions for this claim phrase are essentially the same as their construction for the "verifying" step discussed above. Likewise, the parties dispute remains the same. Accordingly, as explained above, the Court should adopt Teledyne's construction because it is consistent with the plain claim language.

"Digital Storage Medium": Claims 7, 13 and 15²⁸ F.

As explained above with respect to the claim term "system server," each of the claims of the '468 patent generally describe a remote "system server" that provides data updates to a vehicle. Consistent with that analysis, Teledyne's proposed construction for the term "digital storage medium" in the context of these

After further consideration, Teledyne has no objection to the aspect of Honeywell's construction for the "receiving step" insofar as either the vehicle server or the component can perform the check to verify that the data update was properly loaded.

Teledyne has revised its construction to be consistent with the construction of "system server," which includes a "remote device or computer system or software."

claims is "a <u>remote</u> device or computer system or software on which computer-2 executable instructions can be stored." 3 G. "Operable To Execute The Method": Claims 7, 13 and 15 4 As explained above with respect to the claim term "digital storage medium," the context of these claims requires that "a remote device or computer system or 6 software" include computer-executable instructions that are "operable to execute the method" of the '468 patent. Accordingly, the plain language of the claims makes 8 clear that this digital storage medium must execute each and every step of the 9 method. No other construction is suggested. 10 Moreover, Honeywell's prosecuting attorney agrees that a device that is "operable to execute a method" consisting of a number of steps, must be capable of 12 performing each and every step. <u>See</u> Paunovich Decl., Ex. A at 308:13-309:9.

H. "At A Pre-Determined Time": Claims 9, 12, 13 and 15

The parties do not seriously dispute that the plain claim language requires the system server to transmit a data update at a time that is scheduled in advance. Honeywell's construction, however, improperly incorporates details from the specification into its construction, including "or that is determined by a program in accordance with pre-determined rules based on user inputs and/or data in a database." Joint Claim Construction Chart, Honeywell's Proposed Construction, Ex. A at 32. There is simply no reason to incorporate such detail, and thus, Honeywell's proposed construction should be rejected. Phillips, 415 F.3d at 1320 (quoting SciMed, 242 F.3d at 1340) ("one of the cardinal sins of patent law" is "reading a limitation from the written description into the claims."). QUINN EMANUEL URQUHART OLIVER & DATED: February 25, 2008 HEDGES, LLP

Attorneys for Plaintiff Teledyne Technologies, Inc.

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